

LSP1 (TDP153): sc-53363

BACKGROUND

pp52 (human) or LSP1 (murine) is a hematopoietic-expressed gene that encodes an F-actin-binding, leukocyte-specific (including B and T lymphocytes, granulocytes and macrophages), phosphoprotein. However, mRNA splice variants that do not encode the lympho-specific protein are expressed from this gene in nonlymphoid cell lines as well (myocytes, stromal cells and fibroblasts), suggesting pp52 has a divergent role in signal transduction. The pp52 (LSP1) locus maps to human chromosome 11p15.5, which is implicated in tumor-related chromosomal translocations found in chronic lymphocytic leukemia. The pp52 promoter contains key elements that control transcriptional activity including an initiator specifying the unique 5' terminus of pp52 mRNA, tandem pairs of Ets and SP1 motifs, and a single C/EBP motif. LSP1 binds the cytoskeleton and has been implicated in affecting cytoskeletal remodeling in a variety of leukocyte functions, including cell motility and chemotaxis.

REFERENCES

1. Gimble, J.M., et al. 1993. Alternatively spliced pp52 mRNA in nonlymphoid stromal cells. *J. Immunol.* 150: 115-121.
2. May, W., et al. 1993. Human lymphocyte-specific pp52 gene is a member of a highly conserved dispersed family. *Genomics* 15: 515-520.
3. Omori, S.A., et al. 1997. Differential interaction of nuclear factors with the leukocyte-specific pp52 promoter in B and T cells. *J. Immunol.* 159: 1800-1808.
4. Pulford, K., et al. 1999. Lymphocyte-specific protein 1: a specific marker of human leucocytes. *Immunology* 96: 262-271.
5. Miyoshi, E.K., et al. 2001. Aberrant expression and localization of the cytoskeleton-binding pp52 (LSP1) protein in hairy cell leukemia. *Leuk. Res.* 25: 57-67.

CHROMOSOMAL LOCATION

Genetic locus: LSP1 (human) mapping to 11p15.5.

SOURCE

LSP1 (TDP153) is a mouse monoclonal antibody raised against tonsil cells of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LSP1 (TDP153) is available conjugated to agarose (sc-53363 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53363 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53363 PE), fluorescein (sc-53363 FITC), Alexa Fluor® 488 (sc-53363 AF488), Alexa Fluor® 546 (sc-53363 AF546), Alexa Fluor® 594 (sc-53363 AF594) or Alexa Fluor® 647 (sc-53363 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53363 AF680) or Alexa Fluor® 790 (sc-53363 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

LSP1 (TDP153) is recommended for detection of LSP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LSP1 siRNA (h): sc-42899, LSP1 shRNA Plasmid (h): sc-42899-SH and LSP1 shRNA (h) Lentiviral Particles: sc-42899-V.

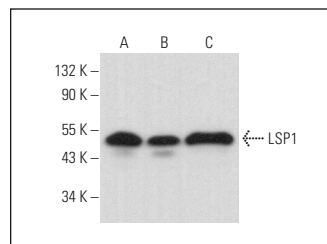
Molecular Weight of LSP1: 52 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, NAMALWA cell lysate: sc-2234 or BJAB whole cell lysate: sc-2207.

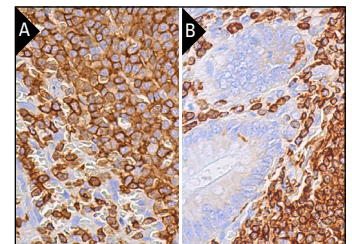
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



LSP1 (TDP153): sc-53363. Western blot analysis of LSP1 expression in Raji (A), NAMALWA (B) and BJAB (C) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



LSP1 (TDP153): sc-53363. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing membrane and cytoplasmic staining of cells in white pulp and cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing membrane and cytoplasmic staining of lymphoid cells (B).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.